

CLAIMS

1. A vibratory screen tensioning member comprising an elongated body, a base on said elongated body, and a plurality of spaced fingers on said base extending longitudinal of said body.
2. A vibratory screen tensioning member as set forth in claim 1 wherein each of said fingers has a first portion joined to said base, and a second portion joined to said first portion and which terminates at a free outer end.
3. A vibratory screen tensioning member as set forth in claim 2 wherein said second portion is narrower than said first portion.
4. A vibratory screen tensioning member as set forth in claim 3 wherein said first portions of adjacent fingers have sides which converge toward each other.
5. A vibratory screen tensioning member as set forth in claim 4 wherein a plurality of said fingers are symmetrical about their centerlines.
6. A vibratory screen tensioning member as set forth in claim 2 wherein said fingers are flexible and resilient.
7. A vibratory screen tensioning member as set forth in claim 1 wherein said base is substantially U-shaped in cross section and includes first and second sides.

8. A vibratory screen tensioning member as set forth in claim 7 wherein said fingers extend outwardly from said first side.
9. A vibratory screen tensioning member as set forth in claim 8 including an elongated stiffener rod connected to said second side.
10. A vibratory screen tensioning member as set forth in claim 9 wherein said elongated stiffener rod includes a central portion connected to a central portion of said second side and outer end portions connected to outer end portions of said second side.
11. A vibratory screen tensioning member as set forth in claim 7 including an elongated leaf spring connected to said second side on the opposite side thereof from said first side.
12. A vibratory screen tensioning member as set forth in claim 7 including a block effectively connected to said second side at the substantially central portion thereof.
13. A vibratory screen tensioning member as set forth in claim 12 including a bolt connected to said block and extending outwardly in a direction away from said second side.
14. A vibratory screen tensioning member as set forth in claim 13 wherein each of said fingers has a first portion joined to said first side, and a second portion joined to said first portion and which terminates at a free outer end.

15. A vibratory screen tensioning member as set forth in claim 14 wherein said second portion is narrower than said first portion.
16. A vibratory screen tensioning member as set forth in claim 15 wherein said first portions of adjacent fingers have sides which converge toward each other.
17. A vibratory screen tensioning member as set forth in claim 16 wherein a plurality of said fingers are symmetrical about their centerlines.
18. A vibratory screen tensioning member as set forth in claim 14 wherein said fingers are flexible and resilient.
19. A vibratory screen tensioning member as set forth in claim 18 including an elongated stiffener rod connected to said second side.
20. A vibratory screen tensioning member as set forth in claim 19 wherein said elongated stiffener rod includes a central portion connected to a central portion of said second side and outer end portions connected to outer end portions of said second side.
21. A vibratory screening machine comprising a frame, opposed first and second side walls on said frame, a fixed screen-engaging member on said first wall, and a movable screen-engaging member on said second wall.

22. A vibratory screening machine as set forth in claim 21 wherein said fixed screen-engaging member comprises a plurality of first spaced fingers extending substantially parallel to said first wall, and wherein said movable screen-engaging member comprises a plurality of spaced second fingers extending substantially parallel to said second wall.
23. A vibratory screening machine as set forth in claim 22 wherein said first and second fingers are flexible and resilient.
24. A vibratory screening machine as set forth in claim 23 wherein said first fingers are located on a first elongated body, and wherein said second fingers are located on a second elongated body.
25. A vibratory screening machine as set forth in claim 24 wherein said first and second fingers are upwardly inclined relative to said first and second walls, respectively.
26. A vibratory screening machine as set forth in claim 22 including a screen, a plate on said screen, first and second side edges on said screen, first and second series of spaced apertures on said first and second side edges, respectively, and said first and second fingers being located in said first and second spaced apertures, respectively.

27. A vibratory screening machine as set forth in claim 26 including first and second sides in said first and second apertures, respectively, and said first and second fingers in engagement with said first and second sides, respectively.

28. A vibratory screening machine as set forth in claim 27 wherein said first and second fingers are flexible and resilient.

29. A vibratory screening machine as set forth in claim 28 wherein said first fingers are located on a first elongated body, and wherein said second fingers are located on a second elongated body.

30. A vibratory screening machine as set forth in claim 29 wherein said first and second fingers are upwardly inclined relative to said first and second walls, respectively.

31. A vibratory screening machine as set forth in claim 27 wherein said first and second sides are spaced a first predetermined distance apart when said screen is in an untensioned condition, and wherein said plurality of second fingers are movable to a second predetermined distance from said plurality of first fingers to thereby tension said plate.

32. A vibratory screening machine as set forth in claim 27 wherein said first and second sides are spaced a predetermined distance apart when said screen is in an untensioned condition, and wherein said first and second fingers are located on first and second elongated bodies, respectively, and wherein said second elongated body is movable to a second predetermined distance from said first elongated body to thereby tension said plate.

33. A vibratory screening machine as set forth in claim 32 including a bolt extending substantially perpendicularly to said second elongated body, a cam body mounted on said second side wall and mounting said bolt, and a cam follower secured to said bolt and positioned adjacent to said cam body.

34. A vibratory screen comprising a plate, first and second side edges on said plate, first and second series of spaced apertures proximate said first and second side edges, respectively, and first and second flanges on said plate located outwardly of said first and second series of apertures, respectively, an undulating screen on said plate, and first and second side edges on said screen secured to said first and second flanges, respectively.

35. A vibratory screen as set forth in claim 34 wherein said first and second side edges of said screen include first and second side edge portions spaced from said first and second flanges, respectively, and first and second bonding agents between said first and second side edge portions and said first and second flanges, respectively.

36. A vibratory screen as set forth in claim 35 wherein said first and second bonding agents are epoxy.

37. A vibratory screen as set forth in claim 35 including third and fourth side edge portions on said screen located on the opposite sides of said first and second side edge portions from said first and second flanges, respectively, said third and fourth side edge portions being immediate continuations of said first and second side edge portions, respectively, and extending downwardly away from said first and second side edge portions, respectively.

38. A vibratory screen comprising a plate, first and second side edges on said plate, first and second series of spaced apertures proximate said first and second side edges, respectively, and first and second flanges on said plate located outwardly of said first and second series of apertures, respectively, a screen on said plate, and first and second side edges on said screen secured to said first and second flanges, respectively.

39. A vibratory screening machine comprising a frame, first and second opposed side walls on said frame, first and second movable screen-engaging members on said first and second walls, respectively, each of said first and second movable screen-engaging members comprising a plurality of spaced fingers.

40. A vibratory screening machine as set forth in claim 39 wherein said first and second movable screen-engaging members each comprise a plurality of screen-engaging members.

41. A vibratory screening machine as set forth in claim 39 including means for moving said first and second screen-engaging members toward and away from said first and second walls, respectively.